

THIS OPINION WAS NOT WRITTEN FOR PUBLICATION

The opinion in support of the decision being entered today (1) was not written for publication in a law journal and (2) is not binding precedent of the Board.

Paper No. 10

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

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Ex parte WILLIAM J. BENETT and JAMES A. FOLTA

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Appeal No. 99-0637  
Application No. 08/711,841<sup>1</sup>

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ON BRIEF

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Before FRANKFORT, GONZALES, and BAHR, Administrative Patent Judges.

BAHR, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on appeal from the examiner's final rejection of claims 1, 3 and 12. The other remaining pending claims 2, 4 through 11 and 13 through 17 are indicated as

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<sup>1</sup> Application for patent filed September 12, 1996.

being objected to as depending from a rejected claim (answer, page 2).<sup>2</sup>

We AFFIRM and enter new rejections pursuant to the provisions of 37 CFR § 1.196(b).

BACKGROUND

The appellants' invention relates to an apparatus and method for connecting a tube to a surface so as to create a zero dead volume seal. An understanding of the invention can be derived from a reading of exemplary claims 1 and 12, which appear in the appendix to the appellants' brief.

The prior art references of record relied upon by the examiner in rejecting the appealed claims are:

Anderson, Jr. (Anderson)	4,690,437	Sep. 1, 1987
Silvis et al. (Silvis)	5,288,113	Feb. 22, 1994

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<sup>2</sup> Claims 1 through 8 and 12 were rejected under 35 U.S.C. § 102(b) as being anticipated by Anderson or Silvis and claims 9 through 11 and 13 through 17 were rejected under 35 U.S.C. § 103 as being unpatentable over Anderson or Silvis in the final rejection (Paper No. 4). The rejections of claims 2, 4 through 11 and 13 through 17 were withdrawn by the examiner with the explanation "upon reconsideration, the rejection is no longer urged against claims 2, 5-11 and 13-17 since such claims are deemed allowable subject to being rewritten to include the subject matter of the parent claims." As claim 4 depends from claim 2 and as claim 4 is not included in the statements of the rejections in the answer, we presume that the examiner intended to include claim 4 in the list of claims indicated to be allowable.

The following rejection is before us for review.

Claims 1, 3 and 12 stand rejected under 35 U.S.C. § 102(b) as being anticipated by either Anderson or Silvis.

The complete text of the examiner's rejections and response to the argument presented by the appellants appears in the answer (Paper No. 9, mailed June 29, 1998), while the complete statement of the appellants' argument can be found in the brief (Paper No. 8, filed April 24, 1998).

#### OPINION

In reaching our decision in this appeal, we have given careful consideration to the appellants' specification and claims, to the applied prior art references, and to the respective positions articulated by the appellants and the examiner. As a consequence of our review, we make the determinations which follow.

We shall sustain the rejection of claims 1, 3 and 12 under 35 U.S.C. § 102(b) as being anticipated by Anderson.

Anticipation under 35 U.S.C. § 102 is established only when a single prior art reference discloses, either expressly or under the principles of inherency, each and every element of a claimed invention. See RCA Corp. v. Applied Digital Data

Systems, Inc., 730 F.2d 1440, 1444, 221 USPQ 385, 388 (Fed. Cir.), cert dismissed, 468 U.S. 1228 (1984).

We find that Anderson does disclose each and every element of the invention recited in claims 1, 3 and 12. For an explanation of how the claims read on Anderson, we refer to the element-by-element analysis set forth by the examiner on pages 3 and 4 of the answer, which reads as follows:

The patent to Anderson teaches in Fig. 4 with regard to claims 1 and 3,

providing a body (48),

retaining in said body a device (24') having a surface thereon (the face of 24'),

positioning a tube [(12)]<sup>3</sup> in a ferrule (24) with the end of the tube [(12)] adjacent the face of the ferrule (24),

positioning the ferrule (24) in the body (48),

compressing the ferrule (24) around the tube [(12)] to form a seal therebetween, and

positioning and retaining a face of the ferrule (24) against the surface of the device (face of 24') to form a seal therebetween.

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<sup>3</sup> The tubing section on the left of Figure 4 is inadvertently labeled "12'" therein, but is referred to as "12" in column 4, line 54. We shall refer to the tubing section on the left as "12" in our decision to distinguish it from the tubing section (12') on the right of Figure 4.

The patent to Anderson also teaches in Fig. 4 with regard to claim 12,

a housing (48) having an opening extending therethrough,

means (24') positioned in a section of said opening in said housing adapted for retaining an associated surface (face of 24') to be sealed,

a ferrule (24) having an opening therein positioned in another section of said opening of said housing in said housing and adapted to retain in said opening of said ferrule an associated tube [(12)] to be sealed therein,

a fitting (26) removably positioned in another section of said opening in said housing adapted to compress the ferrule (24) about an associated tube [(12)] for forming a seal therebetween, and adapted to force a face of said ferrule against an associated surface (face of (24')) for forming a seal therebetween.

With regard to claim 1, the appellants argue that Anderson fails to teach "the features recited in lines 7-10" (brief, page 7), which we interpret to mean the steps of "compressing the ferrule around the tube to form a seal therebetween, and positioning and retaining a face of the ferrule against the surface of the device to form a seal therebetween." We find that these steps are disclosed by Anderson in column 4, line 66 through column 5, line 9, as follows:

The two flat forward surfaces of the ferrules 24 and 24' thus abut one another and are forced into tight sealing relationship with one another by the tightening fasteners 26 and 26', respectively. This tightening also causes the rearward end of the ferrule 24 to be formed radially inwardly to sealingly engage around the tubing 12 and the rearward end of the ferrule 24' to be formed inwardly into sealing engagement with the tube 12' by the action of the conical wall surfaces 46 and 46' on the forward ends of the fasteners 26 and 26', respectively, all as described in connection with the previous embodiment.

In our opinion, the element-by-element analysis of the examiner on pages 3 and 4 of the answer, which is reproduced above, is fully responsive to the appellants' broad argument that "it appears that the Examiner is treating method Claims 1-8 as apparatus Claim 12 and has failed to specifically point out where in each of the references is taught the sequence of operational steps recited in Claims 1-8" (brief, page 7). We find support for the steps outlined by the examiner in column 4, line 48 through column 5, line 9, of Anderson.

Regarding appellants' argument that the throughbore shoulder prevents the tubing from extending through the opening in the ferrule so as to be "adjacent the face of the ferrule" as recited in claim 3 (brief, page 7), we acknowledge that the shoulder, discussed in column 3, lines 25 through 38,

and illustrated but not identified in Figure 4, does prevent the tubing (12) from extending all the way through the ferrule. We also note, however, that, in proceedings before the PTO, claims in an application are to be given their broadest reasonable interpretation consistent with the specification, and that claim language should be read in light of the specification as it would be interpreted by one of ordinary skill in the art. In re Sneed, 710 F.2d 1544, 1548, 218 USPQ 385, 388 (Fed. Cir. 1983). Moreover, limitations are not to be read into the claims from the specification. In re Van Geuns, 988 F.2d 1181, 1184, 26 USPQ2d 1057, 1059 (Fed. Cir. 1993) citing In re Zletz, 893 F.2d 319, 321, 13 USPQ2d 1320, 1322 (Fed. Cir. 1989). The term "adjacent" is defined as "near or close, next or contiguous" and the term "contiguous" is defined as "in close proximity without actually touching" (The Random House College Dictionary (Random House 1973)). In our opinion, the forward end of the tubing (12) is "adjacent" the flat forward face of the ferrule (24), as required by claim 3.

With regard to claim 12, we do not find appellants' argument that Anderson does not disclose the "means" recited

in lines 4 and 5 persuasive (brief, page 7). Specifically, we find that the tubing section (12') and fastener (26'), which are located in a section of an opening or bore in cylindrical member or housing (48), retain the flat forward face of the ferrule (24') and thus respond to the "means" recited in lines 4 and 5 of claim 12.

We shall also sustain the examiner's rejection of claims 1 and 12 under 35 U.S.C. § 102(b) as being anticipated by Silvis.

We find that Silvis does disclose each and every element of the invention recited in claims 1 and 12.

Regarding the sequence of steps recited in method claim 1, Silvis discloses in Figures 5 and 6 and column 7, line 19 through column 8, line 14, a method for connecting a tube (15) to a surface (83h) that creates a seal (104). A body (jacket 94) is provided and a device (sleeve 83) having a surface (83h) is retained in the body (jacket 94) by means of a tube (13) and a first adjustment screw (103) (see column 7, lines 19 through 33). The method further comprises positioning a tube (15) in a ferrule (95) and positioning the ferrule (95) in the body (see column 7, lines 34 through 37). A second



adjustment screw (105) is rotated to press the ferrule (95) and deform it so that its inner surface forms a seal (95a) with the tube (15) and a face (the inner end 95c) of the ferrule (95) is pushed against the surface (83h) of the device (83) to form a seal (104) (column 7, lines 54 through 62).

We are not persuaded by appellants' argument (brief, page 7) that Silvis does not anticipate claim 1 because the ferrule in Silvis is not positioned "in the body" as recited in claim 1. As discussed above and as clearly illustrated in Figure 6, the ferrule (95) of Silvis is positioned in the jacket (94).

With regard to the appellants' argument that the features of lines 7-10 of claim 1 are not disclosed by Silvis, we note that these features are indeed disclosed in column 7, lines 54 through 62, as discussed above.

Regarding apparatus claim 12, Silvis discloses an apparatus for producing a tube (15) to surface (83h) seal comprising a housing (jacket 94) having a hollow central core or opening extending therethrough and means (tube 13 and first adjustment screw 103) positioned in a left section of the opening of the housing (jacket 94) adapted for retaining an associated surface (83h), a ferrule (second ferrule 95) having

an opening therein positioned in the middle-right section of the opening of the housing (jacket 94), a tube (15) and a fitting (second adjustment screw 105) positioned in the far right section of the opening of the housing (jacket 94). The tube (15) is positioned in the opening of the ferrule (95). The fitting (second adjustment screw 105) is rotated to press against the ferrule (95) and compress it about the tube (15) so that its inner surface forms a seal (95a) with the tube (15) and a face (the inner end 95c) of the ferrule (95) is forced against the surface (83h) of the device (83) to form a seal (104) (column 7, lines 54 through 62).

We do not agree with appellants' assertion that Silvis fails to teach "the feature set forth in lines 6-8 of Claim 12" (brief, page 7). As discussed above and as clearly illustrated in Figure 6, Silvis discloses a ferrule (95) having an opening therein which retains the tube (15). Further, the ferrule (95) is located in a section of the opening in the housing (jacket 94).

We shall not, however, sustain the examiner's rejection of claim 3 under 35 U.S.C. § 102(b) as being anticipated by Silvis. In our opinion, the end of the tube (15), which forms

a seal (87) with the taper of the bore (83c) of the sleeve (83), cannot reasonably be considered to be "adjacent" the face (inner end 95c) of the ferrule (95).

NEW GROUND OF REJECTION UNDER 37 CFR § 1.196(b)

Under the provisions of 37 CFR § 1.196(b), we enter the following new grounds of rejection. We are reinstating the rejections of claims 2 and 4 through 7 under 35 U.S.C. § 102(b) set forth in the final rejection which were withdrawn by the examiner on page 2 of the answer.

Claims 2 and 4 through 7 are rejected under 35 U.S.C. § 102(b) as being anticipated by Anderson.

The disclosure of Anderson regarding the method steps recited in claim 1 is discussed in our opinion *supra*.

Regarding claim 2, Anderson (Figure 4) discloses providing a body (threaded cylinder member 48) having an opening or bore therethrough and providing means (tubing section 12' and fastener 26') for retaining the device (ferrule 24') in a section of the opening of the threaded cylinder member (48).

Regarding claims 4 through 6, the ferrule (24) is compressed around the tube (12) to form a seal and positioned

and retained against the device (ferrule 24') by inserting a threaded fitting (fastener 26) into a threaded section of the opening of the threaded cylinder member (48) (column 4, line 66 through column 5, line 9). The fastener (26) may be removed merely by rotation in the opposite direction to unthread it from the opening of the threaded cylinder member (48).

Regarding claim 7, Anderson discloses providing the fastener (26) with a tapered inner end (conical wall surface 46) which cooperates with a tapered (frustoconical) surface on the ferrule (24) to both compress the ferrule (24) around the tube (12) and position the flat forward face of the ferrule (24) against the flat forward face of the device (ferrule 24') (see column 5, lines 1 through 9).

Claims 2 and 4 through 7 are rejected under 35 U.S.C. § 102(b) as being anticipated by Silvis.

The disclosure of Silvis regarding the method steps recited in claim 1 is discussed in our opinion *supra*.

Regarding claim 2, Silvis (Figure 6) discloses providing a body (jacket 94) having an opening or bore therethrough and providing means (tube 13 and first adjustment screw 103) for

retaining the device (sleeve 83) in a section of the opening of the jacket (94) (column 7, lines 19 through 33).

Regarding claims 4 through 6, the ferrule (95) is compressed around the tube (15) to form a seal (95a) and positioned and retained against the device (sleeve 83) by inserting a threaded fitting (second adjustment screw 105) into a threaded section (94e) of the opening of the body (jacket 94) (column 7, lines 54 through 62). The second adjustment screw (105) may be removed merely by rotation in the opposite direction to unthread it from the threaded section (94e) of the opening of the jacket (94). Regarding claim 7, as seen in Figure 6, Silvis discloses providing a tapered inner end (recess 105a) on the second adjustment screw (105) which cooperates with a tapered end of the ferrule (95) to both compress the ferrule (95) around the tube (15) to form a seal (97 or 95a) and position the end surface (95c) of the ferrule (95) against the end surface (83h) of the device (sleeve 83) (see column 7, lines 4 through 14).

CONCLUSION

To summarize, the decision of the examiner to reject claims 1, 3 and 12 under 35 U.S.C. § 102(b) is affirmed<sup>4</sup> and new rejections of claims 2 and 4 through 7 have been added pursuant to the provisions of 37 CFR § 1.196(b).

In addition to affirming the examiner's rejection of one or more claims, this decision contains a new ground of rejection pursuant to 37 CFR § 1.196(b) (amended effective Dec. 1, 1997, by final rule notice, 62 Fed. Reg. 53131, 53197 (Oct. 10, 1997), 1203 Off. Gaz. Pat. Office 63, 122 (Oct. 21, 1997)). 37 CFR § 1.196(b) provides, "A new ground of rejection shall not be considered final for purposes of judicial review."

Regarding any affirmed rejection, 37 CFR § 1.197(b) provides:

(b) Appellant may file a single request for rehearing within two months from the date of the original decision . . . .

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<sup>4</sup> Although the examiner's rejection of claim 3 under 35 U.S.C. § 102(b) relying on *Silvis* was reversed, we note that the rejection of claims 1, 3 and 12 under 35 U.S.C. § 102(b) based on *Anderson* was affirmed, as was the rejection of claims 1 and 12 based on *Silvis*.

37 CFR § 1.196(b) also provides that the appellant, WITHIN TWO MONTHS FROM THE DATE OF THE DECISION, must exercise one of the following two options with respect to the new ground of rejection to avoid termination of proceedings (37 CFR § 1.197(c)) as to the rejected claims:

(1) Submit an appropriate amendment of the claims so rejected or a showing of facts relating to the claims so rejected, or both, and have the matter reconsidered by the examiner, in which event the application will be remanded to the examiner. . . .

(2) Request that the application be reheard under § 1.197(b) by the Board of Patent Appeals and Interferences upon the same record. . . .

Should the appellants elect to prosecute further before the Primary Examiner pursuant to 37 CFR § 1.196(b)(1), in order to preserve the right to seek review under 35 U.S.C. §§ 141 or 145 with respect to the affirmed rejection, the effective date of the affirmance is deferred until conclusion of the prosecution before the examiner unless, as a mere incident to the limited prosecution, the affirmed rejection is overcome.

If the appellants elect prosecution before the examiner and this does not result in allowance of the application, abandonment or a second appeal, this case should be returned

to the Board of Patent Appeals and Interferences for final action on the affirmed rejection, including any timely request for rehearing thereof.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 CFR § 1.136(a).

AFFIRMED; 37 CFR § 1.196(b)

CHARLES E. FRANKFORT	)	
Administrative Patent Judge	)	
	)	
	)	
	)	
	)	BOARD OF PATENT
JOHN F. GONZALES	)	APPEALS
Administrative Patent Judge	)	AND
	)	INTERFERENCES
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JENNIFER D. BAHR	)	
Administrative Patent Judge	)	



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Henry P. Sartorio  
Deputy Laboratory Counsel for Patents  
Lawrence Livermore National Laboratory  
P.O. Box 808-L-703  
Livermore, CA 94551

JDB/ki